

REMARKS

Status

This Amendment is responsive to the Office Action dated July 9, 2008, in which Claims 1-17 were rejected. Claims 1, 16 and 17 have been amended. Accordingly, Claims 1-17 are pending in the application, and are presented for reconsideration and allowance.

Claim Rejection - 35 USC 112

Claim 1 stands rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 has been amended in view of the Examiners comments and withdrawal of the rejection is respectfully requested.

Claim Rejection - 35 USC 103

Claims 1-11 stand rejected under 35 USC 103 as being unpatentable over US Patent No. 6,951,536 (Yokoi), US Patent No. 6,240,312 (Alfano) and WO 01/99703 A2 (Nemeth). Claims 12-15 stand rejected under 35 USC 103 as being unpatentable over US Patent No. 6,951,536 (Yokoi), US Patent No. 6,240,312 (Alfano), WO 01/99703 A2 (Nemeth) and US Patent No. 5,836,872 (Kenen). Claim 16 stands rejected under 35 USC 103 as being unpatentable over US Patent No. 6,951,536 (Yokoi) and WO 01/99703 A2 (Nemeth). Claim 17 stands rejected under 35 USC 103 as being unpatentable over US Patent No. 6,951,536 (Yokoi), WO 01/99703 A2 (Nemeth) and US Patent No. 6,470,092 (Li). These rejections are respectfully traversed.

Yokoi discusses a capsule type camera used for capturing images in a human when it is swallowed. Yokoi does not teach or suggest "c) image processing in vivo images in the examination bundle in a generalized R and G color space for robust disease detection; d) using color image processing algorithms to automatically diagnose one or more abnormalities in one or more of the in vivo images in the generalized R and G color space using generalized R and G colors in the in vivo images", as claimed in pending Claim 1.

Alfano discusses a capsule type camera for capturing images in a human when it is swallowed. Alfano discusses (col. 6, lines 21-35) incorporating a spectroscopic system, which uses optical filters, in device 11 to select different wavelengths to improve image quality for the purpose of improving the sensitivity of disease diagnosis.

A spectroscopic imaging system in device 11 is incorporated into the device and is connected to the CCD image system (or photodiodes, such as avalanche diodes) to improve the sensitivity of the disease diagnosis. Micro scale narrow band filters, color filter system and/or gratings can be added to the illumination source from laser, flash lamp, LED and the collected signal of the CCD camera, photodiode, avalanche photodiodes or PMT to obtain the spectroscopic information on the disease area. Wide-band dielectric filters on the device can be used to separate various colors emitted or absorbed. The filters may be rotated on a MEMS rotation wheels to select different wavelengths to measure light intensities for processing and image analysis to diagnosis.

(Alfano, col. 6, lines 21-36, emphasis added)

Alfano does not discuss how disease is diagnosed, let alone the technique of using image color processing algorithms to automatically detect diseases in the R and G color space using R and G colors of the images (see Claim 1).

Nemeth is directed to distributing data to a third party based on configurable distribution parameters. The system includes a wireless device that can relay the data and, particularly, the data is sent when the amount of data in a memory "exceeds a predetermined threshold". The medical data is limited to data about the "physical condition and composition of the patient", such as particularly blood sugar, blood pressure, and pulse rate. Nemeth does not teach or suggest automatically detecting diseases in generalized R and G image color space using R and G colors of the images.

Kenet discusses monitoring changes in biological surface structures and says nothing about automatically detecting diseases in generalized R and G image color space using R and G colors of the images.

Li discusses using correlation analysis in determining abnormalities. Li says nothing about automatically detecting diseases in generalized R and G image color space using R and G colors of the images.

Since the cited references to do teach or suggest features claimed in Claim 1, Claim 1 is not obvious from the cited references, whether taken alone or in combination. Accordingly, withdrawal of the rejection of Claim 1 is respectfully requested.

Claims 12-15 are dependent on Claim 1, and therefore include all the features thereof. For the reasons set forth above with regard to Claim 1, Claims 12-15 are also believed to be patentable.

The same arguments set forth above are equally applicable with respect to the rejections of independent Claims 16 and 17. Claims 16 and 17 automatically detect diseases in generalized R and G image color space using generalized R and G colors of the images, and are therefore submitted to also be patentable over the prior art.

Summary

Should the Examiner consider that additional amendments are necessary to place the application in condition for allowance, the favor is requested of a telephone call to the undersigned counsel for the purpose of discussing such amendments.

For the reasons set forth above, it is believed that the application is in condition for allowance. Accordingly, reconsideration and favorable action are respectfully solicited.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Carestream Health, Inc. at 585/627-6687 or 585/627-6740.